



DUCT SEALING AS AN ECM

DUCT LEAKAGE = ENERGY LOSS

What We Know about Duct Leakage...

BERKELEY NATIONAL LABS

...released a building commissioning study that showed duct leakage to be the most expensive building fault. Annual energy cost from duct leakage is a **whopping \$2.9 billion!**

ASHRAE

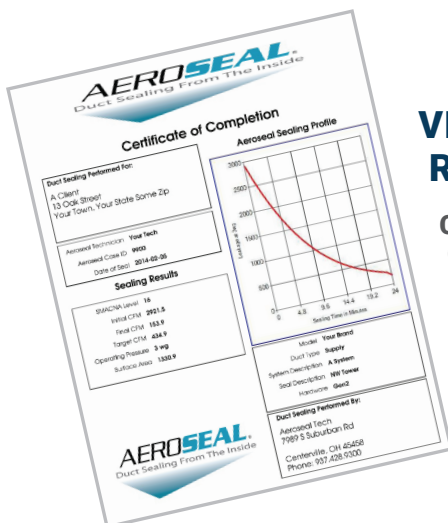
...estimates **75% of buildings have 10-25% air duct leakage**. Aeroseal effectively locates duct leaks and seals them tight (up to 90% improvement).

ENERGY STAR

...ranks air distribution as the **#1 energy savings opportunity** in existing buildings. The average payback for Aeroseal duct sealing is 3 to 5 years!

BUILDING FAULTS	ANNUAL COST
Duct Leakage	\$2.9B
HVAC left on when unoccupied	\$1.9
Lights left on when unoccupied	\$1.7
Airflow not balanced	\$0.7
Improper refrigerant charge	\$0.7
Dampers not working properly	\$0.5
Insufficient evaporator airflow	\$0.3
Improper controls set up	\$0.2
Control component failure	\$0.2
Software programming errors	\$0.1

Source: Building Commissioning: A Golden Case For Reducing Energy Costs, E Mills, 7/09



VERIFIED RESULTS

CERTIFICATE OF COMPLETION

#1 BENEFIT OF DUCT SEALING

1. Increase energy savings

2. Meet duct tightness requirements
3. Improve IAQ and building comfort
4. Avoid cost of replacing ducts
5. Eliminate unsightly mastic/tape on visible ductwork

ENERGY SAVINGS IN THE REAL WORLD

Aeroseal Project: Mixed-Use Office Building

LOCATION – Washington D.C.

FACILITY MANAGEMENT – Sodexo

DUCT EXPERTS – Aeroseal LLC

GOAL – Proper air flow, energy savings

BEFORE AEROSEAL – 8,692 CFM of total leakage

AFTER AEROSEAL – 1,471 CFM (83% reduction)

RESULTS – 28% air flow improvement; \$102k/year savings

ESTIMATED PAYBACK – 1.5 years

BONUS – Improved IAQ. Improved thermal comfort.



Aeroseal Project: Licking Heights Schools

LOCATION – Blacklick, Ohio

COMMISSIONING FIRM –

Heapy Engineering

HVAC SOLUTIONS PROVIDER –

Bruner Corporation

GOAL – Reduce energy costs / fix uneven heating

BEFORE AEROSEAL – Losing 55% of treated air

AFTER AEROSEAL – Delivering 98% of treated air

RESULTS – Reduced duct leakage by 27,350+ CFM.

BONUS – Reduced energy bill by \$45,000/year. Eliminated uneven heating issues.



Aeroseal Project: Correctional Facility

LOCATION – Pennsylvania

SERVICES PROVIDER – Large energy services company (ESCO)

HVAC SUBCONTRACTOR –

PLD Associates

GOAL – Energy savings with minimal disruption

BEFORE AEROSEAL – 2,450 CFM of leakage

AFTER AEROSEAL – 256 CFM of leakage

RESULTS – Through duct sealing alone, the ESCO saved its client \$7,000+ annually, with an ROI of less than 4 years.



About Aeroseal

Aeroseal duct sealing technology seals ducts from the **INSIDE** to reduce duct leakage up to 90%, which saves energy. This highly effective means of sealing all types of HVAC ductwork overcomes shortfalls with mastic/tape and has no access limitations. It finds and seals all leaks up to 5/8" diameter. Payback is usually 3 to 5 years, **AND** the process is **verifiable and guaranteed**.

Our Sealant Formula

The sealant is a stable, non-toxic, non-flammable emulsion of water and vinyl acetate polymer that is aerosolized into 4-10 micron-sized particles and distributed under pressure throughout the inside of the duct system.

Vinyl Acetate Polymer

- Base of chewing gum and hair spray
- Remains rubbery

Certified in accordance w/ UL 1381

- Surface burning
- Mold growth and humidity
- Interior duct burning
- Leakage reduction
- Durability

Properties

- Low VOC content
- 2 hours to cure
- 3-year guarantee
- Effective at multiple pressures, temperatures, and humidity levels

Our Patented Aeroseal Process

1. Develop sealing plan w/ facility personnel
2. Block diffusers and grilles
3. Isolate the AHU
4. Connect Aeroseal equipment
5. Pre-seal test: Benchmark of initial leakage
6. Seal: Inject aerosol sealant
7. Contain sealant in occupied areas
8. Post-seal test: Measure final leakage
9. Present certificate of completion

Use Aeroseal On Your Next Job For Faster, Guaranteed Results!

CALL: 877-FIX-DUCT or VISIT: www.aeroseal.com